METHOD AND SYSTEM FOR PREVENTING DEADLOCK IN FIBRE CHANNEL FABRICS USING FRAME PRIORITIES

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ABSTRACT OF THE DISCLOSURE

A method and system for transmitting frames using a fibre channel switch is provided. The method includes, determining a frame's priority based on a hop count for the frame; placing a frame in a priority queue, where the priority queue is dedicated to frames having similar priorities; selecting a frame for transmission based on the frame's priority, if credit is available, where a frame with a higher priority is sent before a frame with a lower priority; and selecting a frame with a lower priority if enough higher priority frames have been sent. The system includes a switch with at least two priority queues for placing frames with different priorities; a counter that keeps track of frames that are transmitted from the two priority queues; and a credit control module that determines if credit is available before sending a particular frame.